

Work Order ID 121122

September-16-14 12:28:35 PM

121122

Page 1

Item ID: D2521

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Individual Bearpaw

Start Date: 6/16/14 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/16/14 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: ✓ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2521	Rev J								

105

0.00

105

Purchasing

Memo

0.00

Purchasing

ISSUE PO 25836
Cut Blank per D2521 fileCL 14/09/18 2

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

10/4/10/01 (2)

115

QC6- Inspect dimensions to drawing

0.00

115

QC

Memo

0.00

Quality Control

CL 14/10/17 2

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Page 2

Item ID: D2521 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Individual Bearpaw
 Start Date: 6/16/14 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 6/16/14 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* HAAS 1 HAAS CNC vertical machine #1	HAAS CNC VERTICAL MACHINING #1 Memo 1-Inspect material for defects or damage prior to machining 2-Machine as per Folio and Dwg D2521 Identify as D2521 3-Deburr	0.00 0.00				2	0		DAS 20 9-89 14-10-18
140 *140* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00				2	0		DAS 20 9-89 14-10-18
150 *150* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				2	0		JFL 2014-10-29

Work Order ID 121122

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Item ID: D2521 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Individual Bearpaw
 Start Date: 6/16/14 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 6/16/14 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: _____	0.00							
160									
Packaging	Memo	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.00							
Quality Control									

PPPD1104

21

DAS
9/15

2X

SP14-12-1

NOV 05 2014

14/12/2

11-12-02

Picklist Print

June-16-14 1:18:58 PM

Page 1

Work Order ID: 121122

121122

Parent Item: D2521

D2521

Parent Item Name: Individual Bearpaw

Start Date: 6/16/14

Required Date: 6/16/14

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-10-01 New Manufacturing Method JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No				sf	702.3000		15			

MIJHMWB10

**

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

Location

Loc Qty

Loc Code

MAT

329

m129293

329

MAT018

373.3

m128267

47

m128668

326.3

M130421

X15

CL 14/10/03

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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DART AEROSPACE LTD		Work Order: 121122
Description: Bearpaw		Part Number: D2521
Inspection Dwg: D2521	Rev: J	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension			Actual Dimension	Accept	Reject	Method of Inspection	Comments
Dim	Min	Max					
A	0.260	0.266	.260	✓		CNC-02	12" Vern
B	0.90	0.96	.928	✓			
C	0.27	0.330	.290	✓			
D	0.470	0.530	.520	✓			
E	21.740	21.760	21.750	✓		SLOI	Tape
F	0.72	0.780	.750	✓			
G	0.35	0.410	.380	✓			
H	11.490	11.570	11.500	✓			
I	3.41	3.47	3.425	✓			
J	11.790	11.810	11.810	✓			
K	9.47	9.53	9.512	✓			
L	7.190	7.210	7.210	✓			
M	6.910	6.970	6.935	✓			
N	44.47	44.530	44.500	✓		SLOI	Tape
O	6.590	6.650	6.625	✓			
P	0.940	0.980	.945	✓			
Q	18.97	19.03	19.000	✓		SLOI	Tape
R	0.350	0.410	.375	✓			
S	0.740	0.780	.740	✓			
T	0.240	0.280	.240	✓			
U	0.370	0.410	.370	✓			
V	0.740	0.780	.740	✓			
W	0.740	0.780	.740	✓			

DAS

Measured by: **20**
9-89

Date: 14-10-18

Audited by: JFC

Date: 2014-10-24

Prototype Approval: N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O D205-564-011 & D430-688-011	KJ/RF	
B	05.06.15	Dimensions and tolerances changed	KJ/RF	
C	06.08.31	Dimensions updated per D2521 Rev. J	KJ/JLM	



DESIGN	<i>#</i>	DRAWN BY	CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>CP</i>	APPROVED	<i>#</i>	DRAWING NO.	REV. J
				D2521	SHEET 1 OF 3
DATE	06.07.28			TITLE	SCALE
				205 BEARPAW	NTS
A	95.11.28	NEW ISSUE			
B	96.01.11	SHOW BENDING MOVE HOLES			
C	96.01.29	ADJUST HOLE LOCATION FOR TOOLING			
D	96.05.14	ADJUSTED BEAR PAW THICKNESS			
E	96.12.18	43.500 WAS 46.750			
F	97.05.07	ADDED REAR POCKET, MOVED HOLES			
G	98.08.06	ADD C'BORE AND CHAMFER EDGES			
H	03.01.30	CHANGE GEOMETRY FOR RUN-ON LDG.			
I	05.05.20	REMOVE BEND, CHANGE TOLERANCES			
J	06.07.28	CHANGE FOR FLOAT SKIDTUBE			

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 121122 MJS
1406-18

RELEASED

06 08.23 *#*

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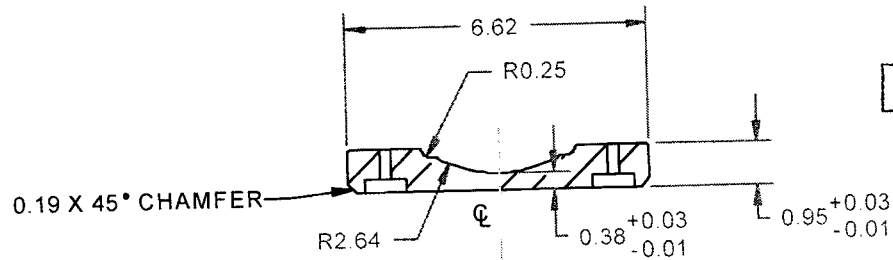
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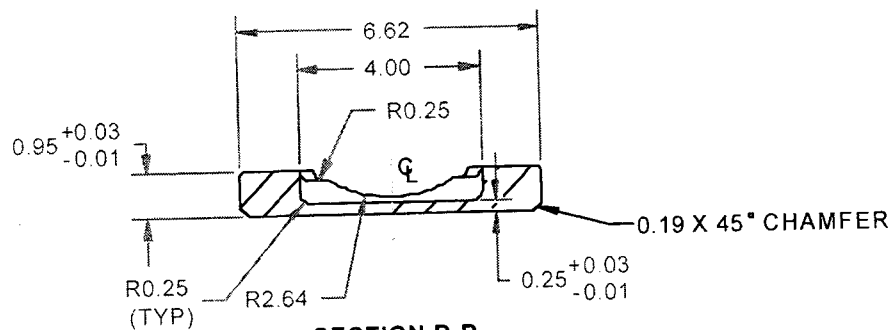
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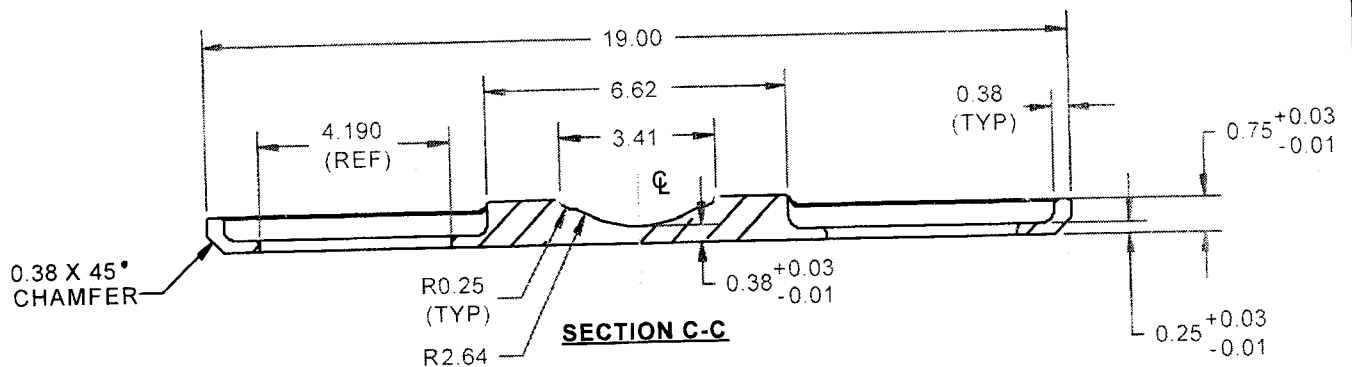
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	C.B.	HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. J
		D2521	SHEET 3 OF 3
DATE		TITLE	SCALE
06.07.28		205 BEARPAW	1:4



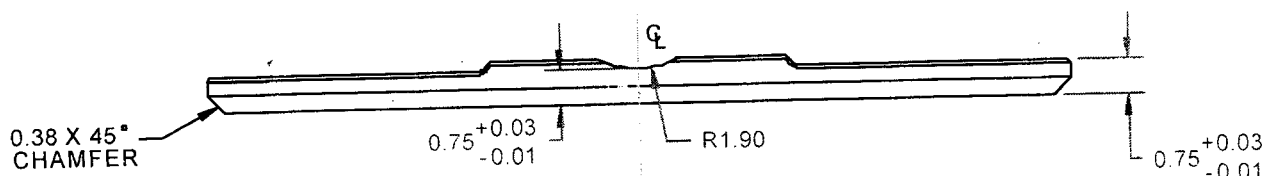
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

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T.P.I. INDUSTRIES INC.

148 GOODFELLOW
DELSON, QUÉBEC J5B 1V4
CANADA
Tel: (450) 633-0484
Fax: (450) 633-0879

Packing Slip

Packing Slip No.: 6316
Date: 2014-09-29
Page: 1

Sold to:	Ship to:
Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada	Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada
Order No.: 100810	Sold By: JONATHAN LESSARD
Shipped By:	Ship Date: 2014-09-29
Tracking No.:	

Item No.	Unit	Description	Quantity
d2432-3	Chaque	d2432-3 bearpaw	2
d2435	Chaque	d2435 bearpaw	18
d2521	Chaque	d2521 bearpaw	22
d2432	Chaque	d2432 bearpaw	15
d4930-1	Chaque	d4930-1 bearpaw	8
d4355-1	Chaque	d4355-1 bearpaw	7
d4353-041	Chaque	d4353-041 bearpaw	2
d4297-1	Chaque	d4297-1 bearpaw	2
d2995	Chaque	d2995 bearpaw	2
2 + 8 + 8 + 4			
po 25836			
Comment: Des frais d'intérêts de 2% / mois seront chargés sur tout compte passé du après 30 jours			